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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,186	03/19/2001	Chicko Ohsumi	204934US0	6978

22850 7590 09/17/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

COLLINS, CYNTHIA E

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 09/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/810,186

Applicant(s)

OHSUMI ET AL.

Examiner

Cynthia Collins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 05/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

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DETAILED ACTION

The amendment filed February 18, 2004 has been entered.

Claims 1-27 are cancelled.

Claims 28-47 are newly added.

Claims 28-47 are pending and are examined.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

All previous objections and rejections not set forth below have been withdrawn.

Information Disclosure Statement

An initialed and dated copy of Applicant's IDS form 1449, filed May 17, 2004 is attached to the instant Office action.

Claim Rejections - 35 USC § 102

Claims 28-47 are remain rejected under 35 U.S.C. 102(a) as being anticipated by EP 0 994 186 A1 (AJINOMOTO CO. INC., 19.04.2000), for the reasons of record set forth for claims 8-27 in the office action mailed September 22, 2003.

Applicant's arguments filed February 18, 2004 have been fully considered but they are not persuasive.

Applicant points out that while EP '186 describes a raffinose synthase gene, a process for producing raffinose, and a transformed plant, the reference is completely silent with respect to drought resistance or resistance to higher salt concentrations. Applicant argues that EP '186

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therefore fails to describe selecting plants for improved drought resistance or higher resistance to high salt concentrations, and that accordingly the reference fails to disclose or suggest the claimed methods. (reply page 8)

The rejection is maintained because the step of selecting plants that have higher drought resistance or higher resistance to high salt concentration as compared to plants prior to introducing the polynucleotide encoding raffinose synthase does not distinguish the claimed method from the method disclosed in the prior art. While EP '186 is silent with respect to drought resistance or resistance to higher salt concentrations, and does not explicitly describe "selecting plants for improved drought resistance or higher resistance to high salt concentrations", the selection step recited in the claims appears to be inherent to the method disclosed in EP '186. One method disclosed in EP '186 is directed to producing plants having increased amounts of raffinose (page 12 lines 51-54; page 21 line 42 to page 22 line 55), and Applicant's disclosure at page 25 indicates that plants having improved drought resistance or higher resistance to high salt concentrations have increased amounts of raffinose. Accordingly, the step of "selecting plants for improved drought resistance or higher resistance to high salt concentrations" does not distinguish Applicant's claimed method from the method disclosed in EP '186, as selecting plants for improved drought resistance or higher resistance to high salt concentrations is the same as producing plants having increased amounts of raffinose.

Claims 28-31 and 38-41 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 849 359 A2 (SUMITOMO CHEMICAL CO, 24.06.1998), for the reasons of record set forth for claims 8-11 and 18-21 in the office action mailed September 22, 2003.

Applicant's arguments filed February 18, 2004 have been fully considered but they are not persuasive.

Applicant points out that while EP '359 discloses raffinose synthetase genes which code for proteins capable of producing raffinose, the reference is completely silent with respect to drought resistance or resistance to higher salt concentrations. Applicant argues that EP '359 therefore fails to describe selecting plants for improved drought resistance or higher resistance to high salt concentrations, and that accordingly the reference fails to disclose or suggest the claimed methods. (reply page 9)

The rejection is maintained because the step of selecting plants that have higher drought resistance or higher resistance to high salt concentration as compared to plants prior to introducing the polynucleotide encoding raffinose synthase does not distinguish the claimed method from the method disclosed in the prior art. While EP '359 is silent with respect to drought resistance or resistance to higher salt concentrations, and does not explicitly describe "selecting plants for improved drought resistance or higher resistance to high salt concentrations", the selection step recited in the claims appears to be inherent to the method disclosed in EP '359. One method disclosed in EP '359 is directed to changing the content of raffinose family oligosaccharides in plants by increasing the content of raffinose in plants (abstract; page 10 lines 46-47; page 11 lines 12-18; page 18 line 15 to page 19 line 41), and Applicant's disclosure at page 25 indicates that plants having improved drought resistance or higher resistance to high salt concentrations have increased amounts of raffinose. Accordingly, the step of "selecting plants for improved drought resistance or higher resistance to high salt concentrations" does not distinguish Applicant's claimed method from the method disclosed in

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EP '359, as selecting plants for improved drought resistance or higher resistance to high salt concentrations is the same as producing plants having increased amounts of raffinose.

Claims 28-47 are rejected under 35 U.S.C. 102(b) as being anticipated by JP411123080-A (AJINOMOTO CO. INC., May 11, 1999), for the reasons of record set forth for claims 8-27 in the office action mailed September 22, 2003.

Applicant's arguments filed February 18, 2004 have been fully considered but they are not persuasive.

Applicant points out that while JP '080 discloses a gene for raffinose synthetase, production of raffinose, and a transformed plant, there is no indication that the reference describes that the plants have increased drought resistance or resistance to higher salt concentrations. Applicant argues that JP '080 therefore fails to describe selecting plants for improved drought resistance or higher resistance to high salt concentrations. Accordingly, the reference fails to disclose or suggest the claimed methods. (reply page 9)

The rejection is maintained because the step of selecting plants that have higher drought resistance or higher resistance to high salt concentration as compared to plants prior to introducing the polynucleotide encoding raffinose synthase does not distinguish the claimed method from the method disclosed in the prior art. While the JP '080 abstract is silent with respect to drought resistance or resistance to higher salt concentrations, and does not explicitly describe "selecting plants for improved drought resistance or higher resistance to high salt concentrations", the selection step recited in the claims appears to be inherent to the method disclosed in JP '080. JP '080 discloses a gene for raffinose synthetase, production of raffinose, a

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transformed plant, and changing a content of oligosaccharide belonging to a raffinose group in plants (abstract), and Applicant's disclosure at page 25 indicates that plants having improved drought resistance or higher resistance to high salt concentrations have increased amounts of raffinose. Accordingly, the step of "selecting plants for improved drought resistance or higher resistance to high salt concentrations" does not distinguish Applicant's claimed method from the method disclosed in JP '080, as selecting plants for improved drought resistance or higher resistance to high salt concentrations is the same as producing plants having changed (i.e. increased) amounts of raffinose.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Remarks

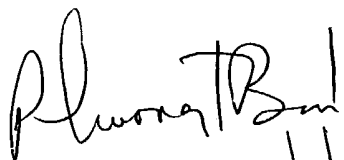
No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Collins whose telephone number is (571) 272-0794. The examiner can normally be reached on Monday-Friday 8:45 AM -5:15 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on (571) 272-0804. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cynthia Collins


PHUONG T. BUI
PRIMARY EXAMINER
9/6/04